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Lecture.

ELECTRO-THERAPEUTICS.

THE NATURE OF ELECTRICITY, AND THE FORMS OF ELECTRICITY USED IN MEDICAL PRACTICE.

An Abstract of a Lecture delivered at the Philadelphia School of Anatomy and Surgery,

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Electricity is not matter, although probably connected with all material forms. It is not a liquid, like water, or a gas, like air; although many philosophers, in their comparative ignorance, have regarded it as a subtle fluid. Hypotheses of one fluid and of two fluids have arisen, and over these wordy conflicts have been waged. Electrical phenomena, however, can be explained without reference to any fluid whatever, by simply looking on the mysterious agent at the root of these phenomena as a force or mode of motion; but, owing to the imperfections of science, and the insufficiency of language, terms which convey the idea of materiality are often used in treating of electricity. Electrical "currents," for example, are spoken of, as if electricity flows like a liquid in a channel; but such an expression is employed only because, as yet, we have no better way of making our ideas known. The electric force does, in fact, in some way, distribute itself along a conductor; and by using the word "current," in referring to the phenomena which result, we avoid the repetition of many words, and are accurate enough for practical purposes.

It is probable that electric phenomena are, in some manner, dependent upon molecular vibrations, and by considering that the nerves conduct impressions by simply transmitting vibrations or undulations, we can arrive at a clearer conception of the action of electricity in and upon the human economy. DuBois-Reymond has shown that galvanism acting on a nerve produces in it a distinct molecular change; that it "polarizes" the electro-motor molecules. According to a recent theory, the peripheral expansions of sensitive nerves take up undulations or vibrations, and convert them into waves capable of being propagated along nervous tissue. The same nerve-tubule may be able to transmit along it vibrations differing in character, and hence, giving rise to different sensations. This doctrine brings nerve force directly into correlation with electricity and the other physical forces, and enables us better to understand electro-dynamics. When we act upon a nerve by means of a current of electricity, we change the rate of nerve vibration, and bring about results in accordance with the degree of this altered motion.

Electricity is always one and the same force, but it may be developed by a variety of methods; and hence, may manifest itself under a number of forms, giving us the different kinds of electricity. What is known as animal electricity is caused by the metamorphoses of matter constantly going on in animals. Thermo-electricity results from the action of heat. Electricity developed by friction is named statical,

or frictional, or franklinic. When it originates from the contact of unlike metals and chemical action, it is termed galvanic or voltaic. When it is produced by magnetism, it is called magneto-electricity; and when magnetism, on the other hand, springs from electricity, it bears the name of electro-magnetism. The so called faradic electricity results from various actions—electric, electro-magnetic, and magneto-electric.

In the early history of electro-therapeutics, frictional or statical electricity, also called franklinic, after Franklin, was largely in vogue. It is still employed considerably in England and Germany, especially in certain public institutions of those countries. Golding Bird, Gull, and Radcliffe, of the former nation, and Schwanda, Frommhold, and Clemens, of the latter, have been among its strong advocates. Tibbits attributes to it considerable value, and thinks that it has been suffered to fall into unmerited disuse. Amenorrhœa, chorea, aphonia, facial neuralgia, and some forms of paralysis, are among the diseases for the relief of which it has been successfully used. I believe that it has a definite place in electric medicine; but it is not my design, during the present course, to devote any time to its discussion.

As galvanic and faradic electricities are the two forms with which you will most likely have to deal, it is of first importance to have clear ideas of what they are, and a proper understanding of the apparatus for their development.

"Galvanic" and "Faradic," and similar words, have been derived from the names of Galvani and of Faraday.

A galvanic apparatus, in medical parlance, is an instrument for the production and utilization of that form of electricity which is derived directly from the cells of a battery. Any two dissimilar substances, as zinc and copper, or zinc and carbon, immersed in an acid or saline liquid, and then brought into contact, will give rise to electricity, and, in fact, constitute a galvanic battery of one cell. Four, eight, sixteen, thirty, or any number of cells, may be combined in a galvanic battery as it is found in practice.

Various contrivances for starting, measuring, interrupting, modifying, or changing the polarity of the electricity, are usually attached to the galvanic instruments of physicians, but these have nothing to do with the origination or calling forth of the force; true galvanism being the result simply of the contact of the unlike bodies, and of the actions going on in the cells.

The faradic apparatus is also known as the induction coil. What is meant by induction? Electricity is said to travel or to be conveyed either by conduction or by induction; by the former it is distributed from point to point through a homogeneous substance; by the latter it is transferred or communicated from one body to another, the two not being in actual contact. One electrified body *induces* or calls forth electricity in another which is near. A magnetic or magnetized substance, likewise, if placed in the neighborhood of some other magnetizable body, as iron or any ferruginous material, will cause the latter, by induction, to exhibit magnetic properties. We all, doubtless, know the effect which a magnet has on a suspended magnetic needle, causing it to move in various directions, according to the pole presented, and the line of approach. Œrsted discovered that a wire conveying an electric current affected a poised magnetic needle as another magnet would do—deflecting the needle to one side or the other, or elevating or depressing it, according to the position of the wire and the direction of the current. If a bar of soft iron is surrounded by insulated wire, and electricity is passed through the latter, the bar becomes magnetic by induction, and so remains as long as the current continues.

Faraday argued, and experimentally demonstrated, that as a wire conveying a current acts like a magnet, it ought, by induction, to excite a current in another wire near it. A current passing through a conductor will induce a current in the opposite direction in a second conductor parallel to the first. Suppose the case of a coiled wire connected at either extremity with the poles or electrodes of a galvanic battery, and also suppose a second coiled wire parallel with and near to the first. As soon as the circuit is formed, and a current passes from positive to negative in the first coil, a secondary current is induced in the second wire, but in an opposite direction. This current runs but for a single instant; but as soon as the current passing through the first wire is broken, an instantaneous current, with its direction reversed, is again established in the second.

It was Faraday, also, that advanced and demonstrated the proposition which is at the foundation of the science of magneto-electricity; namely, that as magnetism is induced by electric currents, so magnets ought, by induction, to excite electric currents. A single ex-

periment will illustrate all that it is necessary, for present purposes, to know about this subject of magneto-electric induction. Let a helix be connected with a galvanometer, and thrust a bar magnet quickly into the open space within the helix. The needle of the galvanometer will be deflected in a certain direction. Suddenly withdraw the magnet from the coil, and the needle will take an opposite course. The magnet has induced electric currents in the wire, in each instance in an opposite direction.

The faradic machine seems, at first sight, somewhat complicated; but with a good general understanding of these principles, its working becomes readily comprehensible. It consists, in the main, of the following parts: 1. A small battery of one or two cells, the starting point of the electric current; 2. A primary coil, which is made of comparatively short and thick insulated wire, and which connects with the battery; 3. A self-acting contrivance, so placed in relation to one of the wires from the battery to the primary coil, as to cause the current, which would otherwise be continuous, to be constantly broken and renewed; 4. A secondary coil, which surrounds the primary, and is composed of comparatively long and fine insulated wire; and 5. A core of soft iron within the primary coil, in which magnetism is excited by the current passing through the primary wire.

Various factors, therefore, go to make up the net result, which is termed faradism, or the faradic currents. You have the current which is circulating in the circuit of which the battery and the primary coil form parts. In this primary coil is also an additional current, which is commonly called the "extra current." It is evident that each turn or winding of the helix is practically parallel to the other turns; and from the principles already considered, the windings will act inductively on each other, both on the opening and closing of the circuit, and give extra currents. For reasons which will be discussed hereafter, the extra current is perceived only in one direction. Every time the current is broken or opened, and also every time it is made or closed, in the primary coil, an induced current is generated in the secondary, so that in the latter we have to and fro or alternating currents of momentary duration. Finally, magnetism is induced in the core of soft iron within the primary coil, and this magnetism reacts by induction on the coil, to modify the general result.

COMMUNICATIONS.

ON THE USE OF THE CHLORATE OF POTASSA IN DIPHTHERIA AND PSEUDO-MEMBRANOUS CROUP.

BY THOMAS M. DRYSDALE M. D.

Read before the Philadelphia County Medical Society, January, 1877.

In an address on Tracheotomy, which I had the honor of presenting to the Medical Society of the State of Pennsylvania, in May, 1874, the attention of the members was drawn to a peculiar method of using the chlorate of potassa in diphtheria and pseudo-membranous croup, which I believe to be original, and which, in my hands, has given excellent results. The prevalence of the first-named disease in an epidemic form induces me to bring again this matter before you.

Perhaps it may be considered unnecessary to direct the attention of members to the use of the chlorate of potassa in diphtheria, as it is held by many to be a common remedy in this disease, and has been recommended in membranous croup. But if any one who offers this objection will investigate the subject, he will find that the use of this drug is not so general as he may suppose, and he will also find that but few really have full faith in its virtues.

To prove that many doubt its powers as a remedy in these diseases, it is only necessary to consult our text-books, for even so recent an authority as Aitken does not mention its use in diphtheria; nor does the late edition of Pareira, by Prof. H. C. Wood.

This want of confidence in this remedy has interfered with its general use in both of these diseases, from the time when it was first successfully applied in croup, by Chaussier, in 1819. Soon after it was brought into use by this writer, it fell into neglect, and was apparently forgotten, until Dr. Isambert again brought it prominently into notice by his inaugural thesis.* It was then indorsed by Trousseau,† "in cases of average severity," but he denied, however, "that it does any good in cases of severer type." Since then it has been used by a great many physicians, some of them eminent,

* Isambert:—Etudes Chimiques, Physiologiques, et Cliniques, sur l'Emploi Thérapeutique du Chlorate de Potasse, spécialement dans les Affections Diphthéritiques. Paris, 1856.

† Trousseau's Clinical Medicine, Vol. ii, p. 575.

who have added their testimony to the good results obtained by its application in diphtheria and pseudo-membranous croup. But, strange to say, in spite of this evidence, and although our remedies in these diseases are so few and inefficient, it has never come into general use in the treatment of croup; and even in diphtheria it is often neglected, to the detriment of the patient, for some inferior remedy.

Now I wish particularly to direct your attention to what is believed to be the cause of this neglect—*the inefficient doses in which it has been given* For proof of this, it will be necessary to refer you again to the text-books. Prof. Stillé, in his well-known work on Therapeutics, vol. ii, p. 824, says, "The dose for children under three years of age is about five grains, three or four times a day, and for an adult, from ten to thirty grains."

Dr. John F. Meigs, in the work on "Diseases of Children," by Meigs and Pepper, directs the chlorate to "be given in full and frequently repeated doses, as, for example, two or three grains every two hours, to a child of four years old (p. 101); and again, at page 127, in narrating a case of membranous laryngitis in a child six years and one month old, he gives a prescription which he used every three hours, containing two grains of chlorate of potassa in combination with iron. Aitken says,* "It can be used with benefit in five-grain doses, every two hours, in croup." Niemeyer† prescribes "a solution of chlorate of potassa (one drachm to six fluid ounces), with directions to take a tablespoonful in the mouth every two hours, and to keep it in contact with the pharyngeal tissues for some time before swallowing it." This would give an adult five grains every two hours. Examples might be multiplied, but these are sufficient to show the usual doses recommended in these diseases.

That these doses are too small, and so prove ineffectual, can be asserted from the result of my own observation and large experience in the use of this chlorate. In the address which has been referred to (p. 16) will be found this statement: "I have been for many years in the habit of prescribing a saturated solution of chlorate of potassa, thirty grains to the ounce; and giving, according to the age of the patient, a teaspoonful, a dessertspoonful, a tablespoonful, or even a larger quantity, every three hours, in mild cases; but in cases of extreme urgency I have given as often as every half-hour, and with the happiest results."

These doses, you will perceive, are much larger than those generally recommended, for each tablespoonful contains fifteen grains, each dessertspoonful seven and a half grains, and each teaspoonful three and three-quarter grains, and are given according to the age of the patient. For instance, to a child under two years old, a teaspoonful; from two to ten years old, a dessertspoonful; and over this age a tablespoonful, which is also the dose commenced with in adults; the dose being repeated at the intervals already stated, according to the severity of the case. A child, then, of one year of age, suffering from a moderately severe attack of diphtheria, will take, if the medicine is given every two hours, forty-two grains in twenty-four hours. Another, under ten years of age, will take, in the same time, one hundred and eighty grains. While one still older will take three hundred and thirty grains. If the case is severe, of course much more will be taken.

In an immense number of these cases I have continued the use of this salt for days, and in some for weeks, without seeing any evil results follow, except a little gastro-intestinal irritation in some young children, which I have found readily controlled by combining opium with the mixture. In fact, we need not fear to give this salt even more freely than has been here recommended, as the experiments of Isambert, Fountain, Tully and others prove, but when we can obtain all the good results with these doses, of course it would not be wise to give larger.

The formula that I am in the habit of using is as follows:—

℞.	Pulv. potassæ chlorat.	ʒij
	Syr. limon.	fl.ʒj
	Aquæ,	fl ʒiij. M.

This gives a mixture which is pleasant to the taste and is readily taken by children; an important fact, the advantages of which need not be pointed out to you.

It has been asserted that the amount of salt mentioned, 30 grains, cannot be dissolved in an ounce of water, and in a case where I performed tracheotomy for one of our most prominent writers on diseases of children, this was

* Science and Practice of Medicine, by Wm. Aitken, M. D., vol. i, p. 532.

† Niemeyer's Text-book of Practical Medicine, vol. ii, p. 607.

insisted upon. He was, however, persuaded to prescribe it, and was convinced of the truth of the statement by finding the salt in solution when brought from the druggist.

As the authorities differ in regard to the solubility of the chlorate of potassa, I requested Mr. Wm. R. Keeney, a druggist of this city, to investigate the matter so far as it related to the question before us. He has furnished me with the following results of his experiments:—At 60° Fah. fl.℥j of water dissolved 24½ grains of the salt; at 87° fl.℥j dissolved 30 grains, which remained in solution when the temperature was reduced to 60°; at 212° fl.℥j dissolved 240 grains, which crystallized when cooled, but left 30 grains in solution. And last, at 92°, six drachms of water and two drachms of syrup dissolved thirty grains, which represents the formula recommended.

The use of the chlorate of potassa in diphtheria and membranous croup has some advantages not possessed by other remedies. All local treatment, except by the solution itself, is unnecessary, for that it has a solvent action on the membrane, has been proved by M. Barthez,* and the parts involved are so frequently bathed by swallowing it, that a true and free topical application is made every time it is administered. Taking advantage of this local action, I direct the nares to be injected with it when they are affected; and in cases of croup, particularly after tracheotomy, apply it by means of the atomizer.

Another advantage is that other remedies may be used in connection with it. For instance, when there is much spasm of the larynx emetics may be given, and the chlorate used after them; or, when the case is decidedly asthenic, iron and quinine, stimulants and nourishment, may be administered at the same time.

This treatment has proved so successful that when called to an ordinary case of diphtheria, before it has reached the larynx, or traveled upward toward the brain, producing convulsions, I feel but little apprehension; for, in a large practice of many years, but few cases have been met with which have resisted it.

It is not claimed that it will cure diphtheria in every instance, for we will meet with malignant cases in all epidemics of acute infectious diseases which will resist every remedy, or, rather, where the patients are so thoroughly poisoned by the infection that they will die before any medicines can act upon them. But, in fact, so efficient do I consider chlorate of potassa, used in the manner which has been recommended, that I regard it quite as much a specific, if we may use such a word, for this disease, as is quinine in intermittents, or mercury in syphilis.

In my early years of practice, following authorities upon this disease, I treated pseudo-membranous croup by means of the remedies recommended by them; such as, in a few cases, blood-letting; but generally by emetics of various kinds, carbonate of soda and calomel, etc., and met with the success which usually attends such practice in grave cases; in other words, but few recovered. Seeing how little benefit was to be derived from these means, and meeting with success in the treatment of diphtheria by chlorate of potassa, I was led to treat my cases differently. When now called to a case of membranous croup, in its early stage, the use of an emetic is directed, followed by the saturated solution of chlorate of potassa, giving it according to the urgency of the symptoms. If in spite of this treatment the patient is not relieved, tracheotomy is recommended, and after the operation the use of the salt continued.

Many cases could be given which would corroborate what has been said, but I will not trespass on your patience any further than to narrate a case of membranous laryngitis, treated in this way, which was witnessed by some of our fellow-members.

September 20th, 1876, about seven o'clock in the evening, I was called upon by Mr. F. A. Weis, who resides in Second street, above Spruce, to see his little girl, aged four years. He told me that for nearly a week she had had a very sore nose, which discharged an ichorous, offensive matter. She had been a little feverish when this commenced, but thinking it a mere cold in the head, he had procured medicine from the neighboring druggist for her. The discharge diminished, but, September 18th, in the evening, she was seized with a croupy cough, for which he gave her syrup of ipecacuanha, and applied a stimulating liniment to her throat; but, as she was subject to croupy attacks, was playing about the room, and did not seem very sick, no alarm was felt.

American Journal of Medical Sciences, October, 1858, p. 513.

September 19th. She awoke hoarse, and had some difficulty of breathing, which increased steadily until the time I was sent for.

I saw her at 8½ P. M., and found her breathing stridulously, and with great difficulty; her voice was whispering, and she had a constant croupy cough. In examining the throat, the posterior fauces were seen to be coated with a diphtheritic membrane, and a large white patch of the same occupied either tonsil. The cervical glands were enlarged. Over various parts of the body, face and neck were large patches of erythema. A dessertspoonful of the saturated solution of chlorate of potassa was directed to be given every hour, and a piece of flannel, wet with turpentine, was applied over the windpipe, and the upper part of the chest. She was visited again at 10½ P. M., when the dyspnœa was not so urgent.

September 21st, 10 A. M. Pulse 132, but weak. Breathing softer and easier. Directed her to have abundant nourishment, principally milk, and gave her, in addition to the chlorate, one grain of quinine every four hours.

4 P. M. No change.

10 P. M. Respiration 16; pulse 132; sleeping quietly.

September 22d, 10 A. M. Had a severe coughing spell this morning, during which she expelled a large piece of membrane, which they threw away. Told them to save any more that came up. Pulse 132; respiration 20. Has more dyspnœa, with more retraction of the supra-clavicular spaces, etc. Directed the chlorate to be given every half-hour.

4 P. M. Color good; dyspnœa the same; has been playing. Brought up a cylinder of membrane about two inches in length, which they saved.

September 23d, 10½ A. M. Is decidedly worse; dyspnœa extremely urgent; pulse very frequent and difficult to count; respiration 40; voice suppressed; color varies.

4 P. M. Very little change. Has had a spasm of the larynx which nearly proved fatal. I had been urging tracheotomy, but the interference of friends prevented the father, who at first was willing, from giving his consent.

At 2½ in the morning of September 24th I was sent for in haste, to operate. I secured the assistance of Drs. D. Burpee, W. L. Atlee, Jr., W. S. Stewart, and his brother, Dr. S. S. Stewart, of Westmoreland Co., who kindly accompanied me. On reaching the house we found the little patient even worse than when I last saw her. She apparently had but a short time to live. After preparing everything for the operation, the father laid her on the table, saying that we must not operate until she was made entirely insensible with ether. Telling him the danger of its use, we administered it very cautiously, but the increased dyspnœa, lividity, coldness of surface, and failing pulse admonished us to desist. We tried it again and again, but always with the same result. We appealed to the father to permit us to proceed with the operation, as the partial insensibility of the child made it certain that it could not suffer much from the incision, but he was obdurate, and we reluctantly replaced the instruments and left the house. Before leaving I urged the father to continue the chlorate every half-hour, to which he hesitatingly consented, believing that the child was dying, and that medicines now only tortured her.

September 24th, 10 A. M. On visiting the patient, instead of finding her dead, as we feared, she was breathing easier. She had had a severe fit of coughing, and had brought up a complete cast of the larynx, which had greatly relieved her, and she had fallen asleep. Directed the treatment to be continued.

4 P. M. Skin cold and moist; pulse very feeble and frequent, but in other ways the same. Directed the use of a stimulant, in addition to the other treatment.

September 25th, 10 A. M. Has slept well; breathing much easier, but cannot yet speak; pulse of better character and skin warm.

From this time she continued to improve, still having occasional attacks of dyspnœa when crying or excited. The use of the chlorate of potassa was persevered with for ten days more, until the voice was restored and the breathing entirely natural, when it was stopped.

This is but one of many cases of pseudo-membranous croup, or membranous laryngitis, treated successfully by the chlorate of potassa. But enough has been said to bear out the assertion that this salt is not prized so highly as it deserves to be, on account of the small and inefficient doses in which it has been used, and that it is this smallness of the dose which has led men high in authority in our profession to undervalue and deny its virtues in these diseases.

PUERPERAL ECLAMPSIA.

BY J. F. PRITCHARD, M. D.,
Of Manitowoc, Wis.

While so much is being written on the subject of puerperal convulsions, and so many confusing theories advanced as to the causes, nature, and treatment of the disease, I think that deductions from cases of actual occurrence will be a safe guide to their management, and, further, that they depend not on one cause alone, but several.

The cases herewith presented give widely different conditions of the system at the time of attack, but the causes appear to have been nearly alike in both, and indications for treatment similar.

CASE 1.—A robust Scotch-American woman, aged twenty-three; brunette; mother of one living child. Had been complaining of headache for one week previous to her attack, and could recall no event that transpired during the week. Her friends saw her every day, and said she acted strangely, but not sufficiently so to call for assistance. She attended to her ordinary household duties, and was not obliged to remain in bed even. Did not know the exact period of pregnancy, but thinks it was between the fifth and sixth month; was suffering from constipation. Was attacked suddenly while kindling a fire, but as she had no one but a little brother with her, could not learn any particulars. When first seen she had very severe convulsions, lasting for a period of between two and three minutes, with about an equal period of intermission. No consciousness during intermission. Pulse very full and bounding; skin hot and dry; tongue furred and wounded by the teeth; eyes fixed and with conjunctival congestion; pupil does not respond to light, and nearly normal. Bladder empty, so could get no test for albuminous urine, if there had been time. There was moderate uterine contraction, which could be easily detected by palpation. By exclusion, and judging from the condition of the uterus, I concluded her pregnancy to be the exciting cause, and after temporizing by treatment, *secundum artem*, administration of ether, chloroform, venesection, and the usual routine, with no perceptible effect, prompt delivery was determined on. The os uteri was dilated so as to admit the index finger, and delivery was safely accomplished in one and a half hours, by forcible dilation and podalic version. Her convulsions ceased during the time in which delivery was being accomplished, but returned again in a mild form, and continued occasionally until the following day, nearly twenty-four hours in all. About thirty-six hours from the commencement of the attack she became conscious, from which time her recovery was rapid.

In the venesection we were unable to get more than twelve ounces of blood, and it was very dark-colored and thick; veins were opened in four different places. Inhalations of chloroform controlled the convulsions by giving it very freely, but as soon as it was removed there was an immediate return. Ether had very much less effect and other remedies none.

CASE 2 was American by birth, aged 30; blonde; mother of two living children; always been healthy; supposed to be seven months pregnant; was subject to fatigue for two weeks previous to her attack, in making a journey. About one week previous, while holding a weight above her head, said she felt something give way, after which time she had not felt well, but still was able to attend to her ordinary duties without difficulty. Attack commenced suddenly, ten hours before I saw her, during which time she had five convulsions, averaging nearly two hours in the interval. Convulsions lasted but a few minutes, with no return of consciousness in the interval. Pulse soft and nearly normal; skin cool and natural. Removed urine with catheter; did not test it, but apparently normal; could detect occasional uterine contractions through the abdominal walls, but with difficulty could reach the uterine neck, and could not determine its condition. Convulsions easily controlled by chloroform. She had been bled freely before my arrival, but with no effect to lessen the convulsions; was obliged to wait three hours before the finger could be introduced into the uterus, after which time delivery was accomplished in the same manner as in Case 1, in one hour. She had no return of convulsions after delivery. The child was softened, and had been dead some time. She made a good recovery.

Now, in both the above cases the treatment applied was the same, viz., immediate delivery, or, at least, delivery as soon as possible. What else could be done? Possibly copious bleeding, in Case 1, might have relieved her somewhat, but I am positive it would not have

cured her, and to do any good it would need to be so copious as to be dangerous. She lost but little blood at the time of delivery, or afterward. As to the absence of urine in the bladder, we were not able to ascertain whether it was voided, or whether there was suppression. The function was afterward established without trouble.

The cause of the disease was undoubtedly, in both cases, uterine irritation, as is proven by the cessation of the convulsions after delivery. In Case 1 constipation was probably also an exciting cause, although this is not so clear. In this case there had been no injury that could be ascertained, but in Case 2 there was separation of the placenta and death of the fœtus.

I will not attempt to say why, in these particular cases, uterine irritation caused the convulsions, but of the fact I am certain, and will leave the theory to others. Albuminuria had no part in the causation, I think, as the sequel would prove. I do not deny that albuminous urine may show a condition of the system predisposing to such attacks, but I think it more commonly only an accidental complication, for there are many that void albuminous urine during this period and yet have no symptoms of any such complications. Possibly it may be a factor, but it is by no means always present.

CASE OF VICARIOUS MENSTRUATION SIMULATING HÆMOPTYSIS—TREATMENT.

BY R. H. G. SEYMOUR, M. D.,
Of Nechanitz, Texas.

On the 26th of January I was called to see a young lady, Miss Mary M., aged twenty-three, who was said to be subject to hemorrhage from the lungs, and who, from her general feelings, was apprehensive she was about to have another hemorrhage. On my arrival at the house, I was informed she had already had an attack, and had taken freely of salt. She had experienced unusual sensations for two days. She expressed herself as feeling a sense of constriction in trachea and larynx, preceded by heat and great soreness in the chest. I found her pulse much accelerated, full and hard, her cheeks flushed, her extremities cool. There was also dyspnœa, and slight headache. She had had her catamenia the week previous to her attack. I made a minute and careful examination of the chest by percussion and auscultation, but could discover no lesion, and but a very slight moist râle. The blood was expectorated while coughing, and was of a dark color, which I attributed to its having been detained in the air passages. Deeming the case to be one of hæmoptysis, I prescribed the fluid extract of ergot hypodermically, of which I injected a drachm in the arm. I also gave a pill of acetate of lead and opium every two hours. But all my efforts to check the disease proved unavailing, until I accidentally found out that, during her last menses, the lady had got her feet wet, and that, instead of lasting a week, as heretofore, and being profuse, they had only lasted two days, and had been scant and painful. I now had no difficulty in diagnosing vicarious menstruation, and prescribed the following:—

℞. Fl. ext. ergot, ℥ij
Fl. ext. gossypium, ℥iss
Fl. ext. senecio aurens, ℥j
Fl. ext. helleborus niger, ℥ij.

Of this I ordered a teaspoonful to be taken every four hours. After taking five doses she had a profuse and natural discharge. The symptoms of hæmoptysis subsided after the second dose. From the happy result of this formula in this case, I shall be inclined to try its effects in cases of amenorrhœa and dysmenorrhœa. I would be glad if some of my professional brethren would try it, and report in the MEDICAL AND SURGICAL REPORTER.

CONVULSIONS FROM PREPUTIAL IRRITATION.

BY. W. A. TYREE, M. D.,
Of Wapella, Ill.

Justice to a very worthy teacher, whose clinics, as reported, I have ever read with great interest, demands that I should report a case which would doubtless have been shrouded in obscurity as to the real seat or cause of trouble, but for the able and practical lecture of Dr. L. A. Sayre, reported in the MEDICAL AND SURGICAL REPORTER, for October 14th, 1876, at page 305, on the subject of "Paralysis from Peripheral Irritation." I do not in the least doubt that very many of your readers had about the same reflections that I did upon reading this lecture, *i. e.*, that they could now look back to cases treated with little or no satisfaction, in which many of the characteristic symptoms were

prominent, who passed from the care of one physician to another equally misled, or unled, as to the cause, until finally abandoned to helplessness or death.

On the 19th of November, 1876, I was called to visit J. P., aged five months, living five miles from town. The history of the case as I received it, was as follows: The boy, when born, seemed to be all right, at least nothing to the contrary was noticed until he was about three weeks old, when he began to have what his mother called "crying spells," which would last from a few minutes to three or four hours. When he had been in this condition for about two weeks, the parents report that he had two or three fits. The child had continued to grow very fast, and was very large for his age. He had continued to cry at intervals, and occasionally some little spasmodic action of the limbs would manifest itself. For a few days past he had seemed to be getting weaker and losing the use of himself considerably. After asking what questions I thought proper, I requested the mother to remove his diaper, at the same time asking if she had ever noticed anything wrong in that part; but immediately upon removing the cloth my question was answered, to that extent, that the penis was swollen and of a purplish red color, although not seemingly very tender to the touch. (The boy crying all the time). When the matter was thus brought up, the parents both said that they knew that there was no swelling there when he was easy. I left him medicine to induce quiet and sleep, for two days, and gave particular directions to notice the penis and report to me accordingly.

In consequence of being ill myself, I did not see the child again until the 2d day of December, at which time the report of the parents with regard to the concurrent erections of the penis with the paroxysms of crying, attended with other indications, were so fully satisfactory, that I did not hesitate in diagnosing it a case of congenital phimosis with adherent prepuce. I then explained the child's condition and the operation I thought necessary for its relief, to the parents, who expressed an anxiety to have it performed as soon as practicable. I left the same quieting treatment for the child, and an agreement to return the third or fourth day afterward, prepared to operate.

I called upon my friend, Dr. John Wright, of Clinton, who very kindly consented to give me his assistance. We met at the time set, and after I had, with some difficulty, succeeded in getting the little fellow under the influence of ether, Dr. Wright proceeded to operate. The first incision had to be pretty long, about one inch in length—as there was a redundant prepuce—which was made on a grooved director. He then carefully detached the prepuce, which was found to be adherent to almost the entire surface of the glans. The operation was concluded by inserting a suture of silk through the detached membrane and skin, and with directions to apply cold water dressings until I should see him again, or about two days.

I returned on the third day and found our little patient flourishing nicely, and the parents highly elated at the results, so far, as they said "he had not cried five minutes since the operation;" upon examination I found the sore was healing nicely, with scarcely any perceivable inflammation. I removed the sutures and requested them to let me know in a week or so how it progressed. I did not see the patient again for several weeks, but found that the operation was a success, and that the little fellow had improved greatly, with good prospects ahead.

Medical Societies.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

REPORTED BY FRANK WOODBURY, M. D.

Conversational meeting, held January 10th, 1877, Dr. Thomas Drysdale, President, in the chair.

After the reading of the paper of the evening by Dr. William Goodell,* a vote of thanks was tendered the author, and the subject opened for discussion.

On the Radical Treatment of Uterine Cancer.

The lecturer, in reply to a question as to the mode of diagnosing uterine cancer in its early stages, from ordinary disease of the cervix, stated that the incipient stage is rarely seen by the physician, but that he would place great reliance on the hardness and immobility of the tissues preceding ulceration. In epithelial cancer there is rarely any doubt as to the nature of the disease. From the first, the offensive character of the discharge, and the friable, ulcerated, often bleeding surface, are characteristic points. Scirrhus is not only much rarer in its occurrence, but also, in its early stages, more difficult to distinguish. Its hardness, and the bosselated

* See page 217, No. 1045.

surface, would lead to the suspicion of cancerous infiltration, and in such a case he would rely upon the test of the sponge tent. If the density have been produced by metritis it will disappear, and the os will soften, from the pressure produced by the tent. But in the other event there will be no alteration in the hardness. In doubtful cases he would rather err on the side of malignancy, and give the patient the benefit of the doubt by removing the vaginal portion of the diseased cervix.

Dr. I. S. Eshleman agreed with the lecturer as to the appearance of the cervix in the early stage, but did not think that there was any one diagnostic test that would enable the physician to say positively that incipient scirrhous disease was present. He had found the most suspicious cases yield kindly to local treatment, and again, promising cases develop malignancy.

He recalled a case where a lady aborted at the eighth month, after a hard and protracted labor, where, in his temporary absence, the fœtus was allowed to perish in the unruptured membranes. He discovered, at the first touch, that a cancer invaded two-thirds the neck of the uterus posteriorly, and fixed the os firmly to the pelvis, so that dilatation depended upon the anterior third of the neck. In this case the sponge tent must evidently have failed as a diagnostic aid. The patient survived more than two years, under palliative treatment. In regard to the propriety of early operation, he mentioned another case where there was found just such hard and bosselated condition of the cervix, as described by the lecturer. This patient was first seen over thirteen years ago, when he advised her to do nothing. She was doing well up to a year ago, when he last heard of her. She may be still living.

Dr. C. R. Prall knew the case last mentioned, and reported that an immense cauliflower growth had succeeded the condition described, and that the patient died four months since, of the disease.

Dr. Barr asked to recall to the mind of the lecturer two cases of uterine cancer, both reported to the Society on the same evening, about six years ago. The first was related by the speaker; the second by another member of the Society. The case reported by Dr. Barr was seen in consultation by the lecturer, and was treated by local and constitutional remedies. Uterine cancer was diagnosed, though the general condition was not cachectic, but, on the contrary, she presented such an appearance of blooming health as to attract the Professor's notice, so as to even occasion remark. The second case was operated upon by amputation of the intra-vaginal neck, the local condition being very threatening. The second case also presented, for a time, the appearance of excellent general health, but died within a year. The first case probably suffered no more than the second, but required continued treatment. She attended to her business over two years and died. The information desired was, would the Professor, from his present view, have operated upon the first case; and could he have expected a better result from operation than had resulted from non-interference?

Dr Goodell. The first case mentioned was treated by arsenic and other remedies, and with local applications of the acid nitrate of mercury. This he would now consider a favorable case for removal, as it would eradicate the disease. When he saw this case first, he labored under the misapprehension that in uterine cancer there is always bad health, but he had learned better since. Of course, when the malady has invaded the neighboring organs a cure need not be expected to follow removal of a portion of the diseased structures; but as long as it is confined to the cervix, the radical treatment is eminently appropriate.

Dr. Barr also described a case which was treated as one of simple ulceration of the cervix, not being looked upon as cancer when first seen, three years ago. The patient improved under treatment so much that she declared herself well. A year or two later she was annoyed by pain and discharge, but for a long time declined examination. Finally, about two months ago, she consented, and an ulcerated, bleeding surface was seen, which, although hardened, did not bear a very malignant appearance, there being but little hemorrhage or discharge. A week later the disease invaded the upper part of the vagina, and two weeks afterward she died of pyæmia and apparently nervous exhaustion. He now inquired whether Professor Goodell would recommend operation in such a case, after the character of the growth was recognized.

Dr. William Goodell. If the patient were dying of the exhausting serous and bloody discharges, he would advise operation, but if inanition were the cause, he would not. He would limit the operation to cases where there was hemorrhage or profuse serous discharge.

Dr. William B. Atkinson was glad to hear this last remark, as it endorsed his treatment of a case operated upon at the request of the relatives, in which there were such exhausting discharges. He removed a large mass by the écraseur, and treated the profuse bleeding which followed by a tampon moistened with Monsel's solution, giving ergot and iron internally. The patient lived one year later, and had only one return of the bleeding, which seemed to come from the body of the uterus, as there was no further disease of the cervix. This case showed the hereditary character of cancer, as she subsequently died of cancer of the stomach, the same disease that carried off her father.

Dr. S. W. Gross had listened with interest to the paper, as it advocated a principle already adopted by surgeons in the treatment of ulcerated morbid growths, to remove them, in order to get rid of the profuse and highly offensive discharges, which are sources of hectic irritation and septic poisoning. A special point in favor of removal of uterine cancer is that it is not so liable to relapse, after removal, as carci-

noma in other organs, in this respect ranking with cancer of the penis. He does not believe, however, that cancer of the uterus can be radically cured unless seen in its earliest stages and the entire organ removed; but it is good practice to get rid of the ulcerated mass, through which the condition of the patient is rendered comfortable, and in many instances life undoubtedly prolonged. He had also been pleased with the recommendation to cauterize the cut surface after ablation of the cervix; this is a principle that should be carried out, using the actual cautery or the strong acids in all cases of sarcoma or carcinoma, as it will destroy cells that have failed to be reached by the knife.

Dr. Packard had found, in some cases of disease diagnosed as malignant, and especially in epitheliomata, apparent benefit from the internal use of arsenic, but the results were by no means uniformly satisfactory. He thought it difficult to predict with assurance the effects of any treatment, in uterine cancer particularly. Sometimes advantage follows the employment of means which would, *â priori*, have seemed altogether inadequate. Nearly four years ago, he was called on by a physician of great and deserved reputation to assist him in removing a sponge-tent, which had been introduced forty-eight hours before, in a case of disease of the os uteri presenting every appearance of malignancy, and considered to be cancerous. By the use of Agnew's hysterotome, and a pair of curved bullet forceps, the tent was with much difficulty withdrawn. With no further local treatment, except the use of detergent washes, the uterus became healthy, and has remained so. Sims reports two cases, and mentions having seen "many others," in which polypi disappeared under the pressure of sponge tents. The urgent symptoms attendant upon uterine fibroids are often relieved by division of the cervix; and the experience of every practitioner will probably confirm the idea, clearly impressed on every page of the modern history of the surgery of the womb, that the diseases of this organ and its adnexa are more amenable to local treatment than those of other portions of the body.

Dr. D. G. Brinton inquired if the lecturer had had any experience with the treatment of cancer recently advocated by Wynn Williams, of London, by applications of bromine, from which several cures have been reported. Another important point, that occurred to him, was the after treatment of cases subsequent to ablation, to prevent the return of the growth. For this purpose arsenic, salts of ammonium, and others, seem very useful, particularly the monobromide of camphor, which has in several cases seemed to prevent the reappearance of malignant growths.

Dr. Goodell has had no experience with phytolacca decandra, nor with bromine, in the treatment of these diseases. It should be mentioned, in diluting this agent, that unless the bromine be very slowly mixed with alcohol an explosion is likely to occur. A second objection to its use is its irritating vapor, which may cause a coryza lasting for weeks. This can be avoided only by plugging the nostrils with cotton dipped in a solution of bicarbonate of soda.

Dr. Benjamin Lee reported a case of enormous enlargement of the glands of the neck, uncertain in their character, where they appeared to literally melt away under the use of the fluid extract of phytolacca, and the patient's health was perfectly restored.

Lacto-peptine.

Dr. I. S. Eshleman presented a specimen of lacto-peptine, prepared by Reed & Carnick, which had given him great satisfaction in relieving the nausea of pregnancy, in three to five grain doses. He also uses it in typhoid fever, given, at first, every two hours, in milk, and subsequently with every meal. He had obtained better results than from ordinary pepsin.

Dr. Hay said that Boudalt's acid pepsin would answer all that is claimed for the lacto-peptine, and should be used when the common neutral pepsin fails.

Dr. Cohen has not had much experience with acid pepsin, but had tried lacto-peptine for several years, with good results in enfeebled digestion, alone or with quinine, but in the latter case not to be mixed with sulphuric acid.

Editorial Department.

Periscope.

Diagnosis and Treatment of Oxaluria.

Professor Primavera, of Naples, draws a distinction between physiological and pathological oxaluria.

The first occasions no functional disturbance, and shows crystals of oxalate of lime in the urine of healthy individuals when they have eaten vegetables containing the oxalate, as spinnage, carrots, sorrel, etc.; it may then be present in the proportion of 0.1 per litre, and if the vegetable has not been too largely partaken of, the oxalate will be held in solution by the sodæ phosphas of the urine.

In testing for oxalate of lime, the author adds to twenty-five centimetres of urine four centi-

metres of a solution of chloride of lime (three grammes of the salt to sixty grammes of water), and about ten drops of aqua ammoniæ; the heavy precipitate of phosphate of lime which follows is dissolved by the addition of glacial acetic acid in excess; and the urine is permitted to stand fifteen hours. Oxalate of lime, urea, and other substances are deposited; a filtrate is obtained, and the residuum washed and acidulated with muriatic acid; uric acid and epithelial scales are removed, the acidulated oxalate has aqua ammoniæ added to it, and in six hours the crystals of the oxalate become visible.

What the author terms local pathological oxaluria, when stone is formed, is easily diagnosticated by means of the microscope. On the other hand, general oxaluria, due to hypochondriasis and nervous troubles, is more difficult to detect, and a careful examination of the urine is very necessary. The patient must avoid eating vegetables which contain the acid; the urine must have stood for a time, decomposition must not have begun, and the urine must not be strongly alkaline, if the examination is to result in an exact diagnosis in a case of suspected oxaluria.

In the treatment of this disease Cantani had the best results with an absolute meat diet; he regarded the disease as bearing a likeness to diabetes, from an etiological point of view. He held the opinion that when oxalic acid does not come from without the body, it is formed within, from starchy and saccharine food, as in diabetes, and that it is formed at the expense of the urea.

The author modifies Cantani's treatment. At first he confines the patient to a meat diet, and forbids the use of vegetables, as well as spirituous drinks. Gymnastic exercises and sodæ phosphas are ordered; later, eggs and cheese; and still later, green vegetables and wine are allowed. When the disease has about gotten well a return to other diet is permitted; at first in small portions, so that the patient may gradually accustom himself thereto. When a stone of oxalate of lime already exists in the bladder, he prefers cystotomy to lithotripsy, because these calculi are small and very hard.—*Allgemeine Medicinische Central-Zeitung*, *No.* 88, 1876.

The Relation of Syphilis to Aural Disease.

In an article in the *Medical Press and Circular*, February 14th, Dr. H. McNaughton Jones, of Cork, observes:—

In children, the fact should not be forgotten that transmitted syphilis is a frequent source of ear mischief. It is difficult to say when the morbid changes which bring about this terrible form of deafness commence. Struma and syphilis have both their share in producing aural complications in young children. But while frequently to the former are attributed the symptoms which are observed in the young child and infant, the presence of the latter is overlooked. In many obscure cases, where there is no proof of the parents being strumous, and no appearance of a strumous diathesis in the child, the search must be cautiously but carefully made for a syphilitic origin. More particularly is this necessary in those acute cases which we occasionally meet when a child or young infant is attacked rapidly with inflammation in the middle ear, followed by profuse otorrhœa, and perhaps convulsions and death. In such a case that I saw lately there was general blood poisoning and collections of pus formed in different parts of the body; the attack was ushered in with snuffles and an abscess over the antrum. The father had syphilis, and the previous children had all died shortly after birth. Suspicions must be awakened by such a history, and it should not be overlooked, both for the sake of the patient and the surgeon. But those cases are most frequently met with in which the deafness is hereditary, and the child has never heard well, without any history of discharge, and when there has been no complaint of pain. These children are not brought in the earlier years of childhood, and we are often not consulted until the growing deafness has become so inconvenient, at or about the age of puberty, that the parents, particularly among the poorer classes, are forced to get advice. The symmetrical nature of these cases, as pointed out by Mr. Hutchinson, may assist in the diagnosis. The presence of the characteristic teeth, also described by him, the coincidence of syphilitic lesions of the cornea, the proofs of old skin affections, and the general characteristic appearance with which we become familiarized on seeing a number of such cases, will confirm the diagnosis. We have Hinton's testimony that one-twentieth of the cases of deafness attending Guy's Hospital had as their cause hereditary syphilis.

Aspiration in the Treatment of Hernia.

Mr. P. L. O'Neill, Medical Officer, Athy Workhouse, writes to the *Medical Press and Circular*:—

The following case is illustrative of the success which Dr. Dieulafoy claims for the aspirator as an aid to the taxis in the reduction of hernia, and likewise of the complete harmlessness of one or more punctures in the intestines, even of patients having a peculiar liability to serous inflammations:—

On Sunday, the 19th inst., a patient, far advanced in Bright's disease of kidney, and who had, for some years, a small hernial protrusion, for which he usually wore a truss, was admitted to the Infirmary under the following circumstances, viz.: Immediately before his admission, while lifting a weight in the absence of the truss, the hernia, which had hitherto confined itself to the region of the external abdominal ring, and was not at any time larger than a pigeon's egg, fell into the scrotum, and in a few moments became as large as a foot-ball, assuming the most exquisite tenderness. I saw him a

few hours after the occurrence, but he could not permit me to touch the tumor. To allay the pain, I injected a quarter of a grain of acetate of morphia subcutaneously, and had warm fomentations and a stimulating enema administered.

One hour afterward I revisited patient, and found pain and tenderness abated, but manifestly symptoms of strangulation, without any diminution in the size of the tumor. I applied the taxis for ten minutes without success; then had patient placed in a warm bath, and repeated the taxis, with no better result. I next resolved on giving Dieulafoy's method a fair trial, and accordingly aspirated the hernia with a hot needle, with very unsatisfactory results. I then replaced it with a No. 2, which brought away some reddish fluid, fecal contents and flatus; the needle, however, becoming clogged, I withdrew, cleaned and reinserted it in another part of the tumor, with the most satisfactory results. Large quantities of flatus were extracted, the hernia reduced to less than half the size it had been a few moments before, and the merest effort at the taxis placed the bowel within the abdomen. From that time to this (Saturday 25th Nov.) patient has had a stool daily, and not the smallest inconvenience in the abdomen.

The features in the case most worthy of remark are:—1st. That morphia, subcutaneously injected, was preferred to the administration of chloroform, which I would have considered dangerous, owing to the renal affection and cardiac weakness. 2d. That patient escaped peritonitis, notwithstanding the peculiar liability such persons have to inflammations. 3d. The facility with which the tumor was reduced after aspiration.

Anæsthesia by the Injection of Chloral Into the Veins.

According to the *Medical Press and Circular*, MM. Tizzoni and Gracinto Fagliata in the *Revista Clinica di Bologna*, have examined the following points:—

1. Is chloral injected into the blood a true anæsthetic?
2. Is there any serious danger from its use?
3. What are the risks?
4. Upon what element does the chloral act?

They have drawn the following conclusions:

1. It is not a true anæsthetic, but a powerful hypnotic. Cutaneous sensibility is not abolished except by large doses. The cornea never properly loses its sensibility.

2. It is dangerous; it is difficult to measure its action, which varies in different people; it easily excites phlebitis. It is a poison to the heart.

3. Chloral acts directly on the muscular fibre. It determines contraction of the muscular fibre, and the heart stops in systole.

4. The best means to remedy accidents from chloral is to throw cold water on the head and spine. Pretended antidotes of strychnia, quinine, atropine, and curara are bad.

Salicin in Rheumatism.

In a discussion of a number of cases of rheumatism treated by salicin, Dr. Maclagan, as reported in the London *Medical Times and Gazette*, says that "the relief of pain is always one of the earliest effects produced." The cases given fully bear out this conclusion: and even when the pain was persistent, and migrated from joint to joint, it was not severe, and there was usually no subsequent swelling. Dr. Maclagan's sixth and seventh conclusions are: that "in acute cases relief of pain and fall of temperature generally occur simultaneously," and that "in subacute cases the pain is sometimes decidedly relieved before the temperature begins to fall." The cases given do not support these two propositions. In three acute cases the joint-pain ceased at least twenty-four hours before the temperature began to fall, and at least four days before it became normal. In three others the temperature became normal before cessation of pain, and in two of them the pain "persisted." In two cases the pain subsided and temperature became normal simultaneously. Perhaps the beneficial action of the drug on the pain ceases when the temperature becomes normal.

Cardiac Complications.—In only three did a murmur develop whilst taking salicin: this was in each case a distinct apex-systolic, and it disappeared before the drug was discontinued. In one case a murmur developed after the discontinuance of the drug. In the other four cases no murmur existed, though the soft, low first sounds in two of them suggested the anticipation of murmurs.

Sweating.—Profuse in three cases; produced miliaria in one of them; was alkaline in a third. In all the rest the skin was simply moist.

The *urine* never gave any large deposit of lithates; was usually only moderately acid, and on one occasion was alkaline. Salicin was detected in the urine in one case six hours after administration, and gave the purple reaction as late as the fourth day after the discontinuance of the drug—in this respect differing notably from quinine.

Salicylate of Soda in Diabetes.

The *London Medical Times and Gazette* says that Dr. Müller Warnek, Assistant Physician in the Clinic of Professor Bartels, at Kiel (*Berliner Klin. Wochenschrift*, 1877, Nos. 3 and 4), sums up the results of a prolonged and careful observation of two cases of diabetes which were treated with the above drug, as follows:—

1. Salicylate of soda can completely remove the symptoms of diabetes mellitus, although its action does not always appear to be permanent. 2. The symptoms of diabetes disappear more rapidly, the larger the dose that is administered and the longer the drug is continued in any particular case. 3. In moderate daily doses (nine to ten grammes per diem), the initial influence of the salicylate upon the diabetic

process appears to become gradually exhausted, whereas, large daily doses (fourteen to sixteen grammes), exert an increasingly powerful effect upon it. 4. Salicylate of soda can be administered in large daily doses in chronic diabetes mellitus for a long period without any special disturbance of the general health, and if any symptoms of poisoning should occur, they will rapidly and completely disappear if the remedy be discontinued for a short time. 5. Salicylate of soda appears to have only a slight irritating effect on the kidneys in diabetes, even after prolonged administration. Dr. Müller Warnek gives full details of his cases in the article referred to. Attention was first called to the use of salicylate of soda in diabetes by Professor Ebstein, of Göttingen, in No. 24 of the *Berliner Klin. Wochenschrift*, 1876. In his cases the salicylate, in doses of five to ten grammes per diem, produced considerable diminution, and even at times complete disappearance, of the sugar from the urine; and he found that still smaller doses maintained the good effect of the earlier large ones.

Reviews and Book Notices

NOTES ON CURRENT MEDICAL LITERATURE.

——Dr. R. D. Webb, of Livingston, Ala., forwards us a copy of his essay on "Hemorrhagic Malarial Fever" (8vo, pp. 107). He gives a careful review of the literature of the subject, and draws from a considerable personal experience a number of new illustrations of types of the disease. Quinine is the sheet anchor of his treatment.

——Dr. A. C. Bernays, of St. Louis, in a pamphlet reprinted from the Richmond and Louisville *Medical Journal*, compares the operations for vesico-vaginal fistula, as practiced by Dr. N. Bozman, of New York city, and by Prof. Gustave Simon, of Heidelberg. It contains an obituary of Dr. Simon, and is illustrated by twelve wood-cuts.

BOOK NOTICES.

First Annual Report of the Secretary of the State Board of Health of the State of Colorado. Denver, 1877. pp. 141.

Dr. H. A. Lemen, Secretary of the State Board of Health of Colorado, presents, in this volume, a large assortment of interesting facts concerning the sanitary relations of that elevated plateau which is embraced in the State of Colorado. Of the several papers contained in the volume, Dr. Lemen contributes one on the climate of Colorado in relation to asthma, and another on pulmonary consumption. The mineral springs of the State are discussed by Dr. T. G. Horn; the influence of altitude on Health, by Dr. W. Edmondson; schools and their relation to health, by Mr. A. Gove; food, drinks and water supply, by Dr. A. V. Small; while Mr. J. A. Barwick, of the Signal Service, U. S. A., supplies a number of meteorological tables.

A Course of Practical Histology; being an Introduction to the use of the Microscope. By Edward Albert Schäfer, Assistant Professor of Physiology in University College, London. With Illustrations, on wood. Phila., H. C. Lea, 1877. 1 vol., cloth, 12vo, pp. 304.

The growing use of the microscope demands text-books from which the practitioner can glean instruction without the need of a personal teacher. This work has such an object in view. It is chiefly occupied with plain directions for the suitable preparations of the animal tissues. An introductory chapter gives an account of the several parts of the microscope, and the purpose for which they are intended. The optical construction of the instrument, and the description of the various tissues, are not included in the author's design. The illustrations are abundant and well-printed, the text clearly paragraphed and the volume well indexed. The parts are described in chapters devoted to the blood, epithelial tissues, connective tissue, cartilage, bone, the heart, the lungs, the generative organs, etc. Pathological histology does not come within the author's scope.

Within the limits which he has chosen, and which we have defined, he will be found a satisfactory guide, and the work a sterling addition to the library of the working microscopist.

THE

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AN IDEAL HOUSE.

About two years ago, Dr. Benjamin W. Richardson, of London, described, in a widely read lecture, a "City of Health," which should combine all the economic advantages demanded by those who "toil and earn their bread," with that security to life and health which it is the noblest duty of our calling to provide.

Not many men build cities, but many build houses. Probably, therefore, a more recent lecture by the same high authority, on "the model town house," will appeal to the practical instincts of a larger class. For that reason we shall give, from the English journals, Dr. Richardson's plan, which embraces both the inner arrangements, the material and the decoration of the dwelling.

"The fundamental alterations in house construction advocated by Dr. Richardson are, first, an arched basement open to the external air; second, a tower at the back of the house, communicating with each floor by a door, and containing the staircase, closets, lavatories, etc., and a lift; and thirdly, the placing of the kitchen and servants' sleeping rooms at the top of the house instead of the bottom, beneath a flat asphalted roof, on which a conservatory or winter garden could be erected."

In reference to covering walls, Dr. Richardson objects to paper, because it retains dust, and cannot be washed, and because the paste "decomposes under moisture, and yields its decomposing particles to the air." He prefers paint, but holds that a good and artistic substitute for wall-paper is still needed. In reference to mural decorations, he thinks simple geometrical figures preferable to more complicated designs, which can easily be distorted by the eye into ugly or unreal forms.

"Damp on walls and furniture was the subject of much useful comment. It is well to remember that damp walls are chiefly objectionable, as leading to damp bedding and clothing. The presence of a fair proportion of aqueous vapor in the air is essential to comfort and well-being, and it would perhaps have been better if the lecturer had pointed this out. The real evil of damp walls is that water evaporates from them when the temperature of the room rises, and is deposited on clothing and bedding when the room cools. Good ventilation and uniform temperature, both properly urged as essentials in a model house, reduce the danger of damp walls to a minimum."

For illuminating purposes, the lecturer objects to gas, because it contains six per cent. of carbonic oxide, and remarks that an atmosphere containing one part of the gas in two thousand produces painful symptoms when breathed.

Notes and Comments.

A Mistake and its Result.

We find in the *Progreso Medico*, a journal which we have recently received from Madrid, the following case, which is of some interest on account of a curious mistake that produced the most happy results in the treatment of a case of acute sciatica.

The case in question is that of a man, of a good constitution, who suddenly became affected with a pain in the left hip, which got worse by walking. The pain, which at first was circum-

scribed, soon extended to the thigh and the entire left extremity, obliging him to keep his bed. There was no fever nor sordid state of the tongue; the pains were acute, piercing, and intermitting.

The physician who was called, finding the principal painful symptoms which characterize the sciatic neuralgia, prescribed a potion consisting of three ounces of honey and rose water, with a drachm of oil of turpentine, of which mixture the patient was to take a tablespoonful four times daily; and also, a mixture of two ounces of oil of turpentine and a drachm and a half of laudanum Sydenhami, with which the painful parts were to be rubbed.

The prescriptions were put up and delivered to the wife of the patient, who mistook the vials, and instead of giving her husband the potion, rubs him with it, and gives him a tablespoonful of the liniment. The next morning the physician calls and finds his patient walking about, perfectly well; greatly surprised (and perhaps disappointed), he inquires whether the patient has followed all his directions, when, from the explanations which are given, he comprehends the mistake. The patient stated that, after having taken the medicine, he felt a severe burning and dryness in the epigastric region, fauces and mouth, followed by nausea, thirst, cephalalgia, vertigo, and drowsiness; at last he fell asleep, and slept profoundly for eight hours, when he awoke, feeling perfectly well.

We must leave it to our readers to draw their own conclusions from this interesting case.

The External Use of Chloral Hydrate.

In a late number of the *Lancet*, Dr. W. B. Kesteven states that he has tried chloral hydrate externally with great success in neuralgic pains and in cancer of the breast, in cases in which other sedatives and narcotics have failed to give relief.

The mode of application is by the saturation of folds of lint, of the size of the part to which it is to be used, brought into close contact, then covered with three or four layers of lint covered with oil-silk or spongio-piline wrung out of hot water. The application to raw surfaces, of course, requires some care in manipulation.

The strength of the solution is about four drachms to sixteen ounces of water. The addition of a small quantity of glycerine is advantageous. Chloride of zinc, or perchloride of iron, can be combined with the chloral in certain cases.

In the *St. Petersburger Medicinische Wochenschrift*, December, 1876, Dr. Th. Dmitrieff states that he has arrived at the following results with regard to the external use of chloral-hydrate. 1. It arrests various fermentative processes, such as ammoniacal and lactic acid fermentations, even in so weak a solution as one per cent. 2. A one per cent. solution applied to wounds discharging unhealthy offensive secretion quickly removes the bad smell; while at the same time (3), through its stimulating properties, it produces a prompt development of healthy granulations, and (4) hastens cicatrization. 5. Chloral-hydrate applied externally, has a locally sedative action. The observations were made partly on dogs, and partly on men.

Eau de Cologne as an Anæsthetic.

At a recent meeting of the Nice Society of Medicine, Dr. Hugues presented some observations upon the anæsthetic influence of Eau de Cologne, which he had recently noticed. In one instance, that of a young lady afflicted with tubercular consumption, and with whom injections of morphine and the use of chloral had failed to produce the desired repose, a friend suggested a trial of eau de cologne, which she had already used with success in similar circumstances on some twenty different occasions. An immediate experiment was made, by placing a handkerchief well moistened with cologne under the nostrils of the invalid, who, in the space of seven minutes, sank into a profound slumber. The same experiment was repeated in other cases, with excellent results.

The Nature of Colloid Substance.

In his late work on the *Nervous Centres*, Dr. V. Magnan shows that diffuse interstitial encephalitis may be accompanied at certain circumscribed points by intense irritation, causing a very active proliferation of the elements of the neuroglia and of the vascular walls. The new elements thus formed, instead of becoming converted into fibres of connective tissue, or undergoing fatty degeneration, become infiltrated with colloidal deposit, and he proceeds to describe the alterations that the middle layer of the cortical portion of the cerebrum undergoes in colloidal degeneration, and the mode in which the vessels become converted into bright,

highly refractive tubes, with immensely thickened walls, which become fissured by longitudinal striæ and lacunæ.

He gives the following as the characteristics of colloid substance:—It is a hyaline substance, only slightly transparent, feebly refractile, with an occasional bluish reflex. It is insoluble in alcohol, ether, and chloroform. It dissolves slowly in concentrated acetic acid, is readily colored by carmine and ammonia, but is not colored by iodine, nor by iodine and sulphuric acid. It is not dissolved by hydrochloric acid, nor by solutions of potash or soda, unless when warmed. It is certainly neither of an oleaginous nor of an amylaceous nature.

Toughened Glass.

The discovery, by M. de la Bastie, of toughened glass has not yet been made of economic value. It seems that some difficulty is experienced with the bath of grease or paraffin which De la Bastie uses for tempering his glass; and he has had to devise a means of preventing the ignition of the inflammable constituents of the bath, which means has to some extent added to the complication of his process. In the presence of this difficulty other inventors found their opportunity, and besides the process invented by Herr Siemens, of Dresden, Herr Pieper has also devised a method of tempering and hardening glass, which is so far successful that the German glass-makers have given £15,000 for the exclusive right to use it in their country. The new process consists of submitting the glass, while at a red heat, to the action of superheated steam, a process which of course effectually disposes of the difficulty and danger attendant on the use of an inflammable bath.

The Salicylates in Rheumatism.

The *Lancet*, in a recent editorial, says:—The very remarkable consensus of opinion as to the value of salicylates in rheumatic fever is the more important as it comes from those who have the reputation of being slow to adopt new things, on account of their novelty, and especially when such men as Sir Wm. Jenner concur in its praise. Those who know how multiform a disease acute rheumatism is, and how variable is its course under any and every treatment, are the slowest to adopt with enthusiasm any new specific in its treatment; but there can now be little question that salicin and salicylates, especially the latter, do exert an influence in its cure which is quite peculiar to them. An interesting field of inquiry yet lies open as to their mode of action, and their value in other acute and chronic febrile diseases.

Alcohol and Absinthe.

Dr. V. Magnan, in a recent work, shows that the prolonged administration of alcohol to the dog causes marked changes in its habits and characters. It may be observed to suffer from illusions, hallucinations, and delirium, from trembling, and disturbance of the digestive organs. Post-mortem examinations exhibit various stages of steatosis of the liver, kidneys, heart, inflammatory complication of the meninges and of the spinal cord, pericardium, and coats of the stomach. Essence of absinthe, on the other hand, produces convulsive shocks in the head and anterior parts of the body, and when given in large doses it determines epileptic attacks and delirium.

Carbon Disulphide as an Antiseptic.

The last number of the *Chemist and Druggist* tells us that Dr. Zöller, in a late number of the *Deutsche Industrie Zeitung*, states that carbon disulphide in a state of vapor is capable of acting as a powerful antiseptic. Two drops allowed to evaporate spontaneously in a closed vessel of the ordinary temperature were found to keep meat, fruit, vegetables, and bread in a perfectly fresh condition for several weeks. The articles submitted to the process acquire neither smell nor taste, the carbon disulphide evaporating entirely when they are exposed to the air at the ordinary temperature. The vapor of carbon disulphide being very inflammable, all experiments on its antiseptic properties should be performed during daylight. We have no doubt this is the secret of a process which has made some stir in this city lately.

Diphtheria in New Zealand.

Mr. J. N. Sinclair, Head Master in Taita School, Wellington, New Zealand, writes to us that the late severe outbreak of diphtheria in that locality is considered to be owing to the defective drainage of this colonial city. Not many years ago the children of a family were swept away by this disease in a particular locality; last year a young girl fell a victim to the same malady near the same place; and this year, at the warm season, one family has lost

all its little ones, five children, from the same cause, and in the same locality. Public feeling has been strongly aroused on the matter, and a meeting was held on the 9th of January, urging the City Council to delay the erection of a Town Hall, in existing circumstances, and to devote their funds to carrying out other and more necessary improvements.

Numerous Parasites.

Dr. P. Engle, of Iowa, writes us the notes of a case of a boy, three years old, who passed, under the action of santonine, seventy-six lumbricoides, from four to fourteen inches in length. The numbers of these parasites sometimes found is astonishing.

CORRESPONDENCE.

CLIMATE AND TRAVEL IN THE TREATMENT AND CURE OF CONSUMPTION.

By an Invalid Physician.

LETTER X—THE WEST INDIES.

ED. MED. AND SURG. REPORTER:—

In my journeyings for health I have often wished that I could repeat the benefits derived from the first long journey I ever made—a visit to Cuba. The old "Moro Castle" that bore me there and back, like myself, is now laid by in a sequestered nook. It was in latter March that we glided into the beautiful and cosy harbor of Havana, whose deep blue waters encircled by verdure-clad shores seemed like a lapis lazuli in emerald setting. I was only on shore four days, but the quaint Spanish city, with its foreign customs and its tropical surroundings, are as plainly photographed on my mind as though it were an ever present picture. Then the appetite generated by the few days' sea journey thither! They have the best eggs there in the world, and the day seemed a perpetual banquet of omelettes, bananas, and ices. I had left home after a winter's work, pale and angular. I returned as fat as a mole and as bronzed as a Mexican. It was natural, after days of sickness came, and I wandered an invalid abroad, that I should look back to that land of beauty, and wonder whether a second visit to it would not treat me as kindly as the first. No one could read Irving, Prescott, or Kingsley, without a wish to visit the tropical isles whose luxuriant beauty the magic of their pens has brought to every northern fireside. Dr. Levis, in his bright little volume, entitled "Diary of a Spring Holiday in Cuba," speaks glowingly of the attractions of the greatest of the Antilles. The result of numerous inquiries during the first year of my sickness, to both physicians and invalids who had tarried there, as to the efficacy of a winter in the West Indies for consumption was not encouraging. I have talked with consumptives in the last three years who, as a body, have represented every health resort in the world; and I have talked with travelers who collectively have represented all climes. Coming, for instance, on the steamers from New York to San Francisco, I met a medical student from Central America; the Peruvian minister to Italy, on his way home, the same gentlemen having previously been governor of the Chincha Islands; a United States naval officer who had been engaged on Arctic expeditions, and an old retired sea captain who had doubled Cape Horn many times. From such co-voyagers one can learn the pleasures, dangers, and benefits of any part of the earth's surface. To return, then, to the West Indies. While I have heard of many benefited by a cruise among these various islands, I know of but two cases where what might be called permanent benefit resulted from a winter on shore. Both were gentlemen, and both known to me. One, with an excellent digestion for rum, wintered on Santa Cruz; the other on the Bermudas. Time and experience seem to have awarded the same judgment to the West Indies as to Madeira, *i. e.*, that while the climate is theoretically perfect it is practically detrimental. British physicians of greatest reputation used to send consumptives to Madeira by crowds. Now, its climate, like that of Italy, is in absolute disrepute for these cases. Finally, even if a patient does do well in the West Indies during the winter, he is early driven therefrom by the debilitating heat of spring; and experience shows that in nine cases out of ten the attempt to return to the nearest mainland port (say Charleston or Savannah), incurs a bronchial attack that undoes in a week the benefits of a season.

I have made three journeys to the West Indies, twice making some stay, the third time cruising down between the eastern end of Cuba and San Domingo, stopping off two of the smaller islands, on my way to South America. The Isle of Pines, south of Cuba, was formerly lauded as a resort for consumptives. It is a very small island, right in the track of the trade winds, and a residence on it was said to be equal to a constant sea-voyage, without any of the latter's discomforts. The island is now a Spanish penal settlement, and, like Cuba, unfitted for a peaceful health resort. The Spaniards of Havana are so insolent, even to a lady, that an American cannot now visit it with pleasure.

At present, by reason of large hotels and extensive advertising, the Bahamas and the Bermudas are most patronized by invalids. Like Barbadoes and Santa Cruz, and unlike St. Thomas, these islands are intrinsically healthy. The natives are fat, hearty and agreeable, and the British soldiers thereon suffer from nothing more than heat.

Bermuda is in the line of travel. Steamers leave New York every two weeks for the main town, Hamilton, and connect there with the Cunard steamer from Halifax to St. Thomas. The latter is the main port of intercommunication,

next to Havana, of the West Indies. The Bermudas are equidistant from Halifax, New York and Charleston, about seven hundred miles. They owe their equable, warm, moist climate more to the gulf stream than to latitude.

An excursion ticket from New York and return, good for six months, costs fifty dollars. The steamers are safe, but second-class in their appointments. They sail under the British flag.

Nassau, the chief resort of the Bahamas, is reached only from Savannah. Steamers sail about every ten days. Invalids and others who wish to leave it for other islands, or the Florida coast, frequently charter sailing vessels, which will make the voyage to the nearest ports for about one hundred dollars.

All the other West India islands are reached by first going to Havana or St. Thomas. European steamers running to Aspinwall touch at one or the other of the West Indies; and a small steamer runs semi-monthly along the whole line of the lesser Antilles.

After my return from the South, in the early spring of 1876, I visited Bermuda, both to experience its climate and to see how consumptives had fared who had wintered there. There is a charm, only to be understood by those who have experienced it, in leaving a wintry port, and after a two or three days' sail arriving at a land of warmth and beauty. Such is the trip from New York to Bermuda in winter or early spring. You leave the first with its icy streets and its piercing winds, to arrive in the second mid the bloom of flowers and the welcome breath of balmy breezes. Early on the morning of our third day out we came in sight of the Bermuda group. The deep blue waters around us were animated with the nautilus and the flying fish. As we neared the coral shores, and approached shallow water, the color of the sea gradually changed from dark blue to pale green, and finally, into creamy white surf. Stately palms lifted their heads here and there, giving a tropical appearance to the scene. The islands are green with grass, and the roadways and low houses, cut and built from the rocky foundation, are dazzling white. Many varieties of geranium and other flowers bloom all winter; we passed to the hotel through rows of them, making the first impression of Bermuda decidedly favorable. The drives through the island are nature's macadamized roads; the scenery is everywhere beautiful; there is good society, principally composed of British civil, military and naval officers, and their families, and the people are hospitable and glad of the company of strangers. The main products of the island are potatoes and onions. Garden vegetables and a few fruits are raised. Those who go there expecting an abundant supply of tropical fruit will be mistaken. All the oranges and lemons we had during our stay were brought by the steamer from New York. Fish are plentiful. The climate of Bermuda is warm and excessively moist. Boots left in a shady bed-room become covered with mould in twenty-four hours. The sun's rays are excessively hot, rendering the protection of a sun-shade agreeable if not absolutely necessary to non-residents. At the same time warm clothing is necessary, because one soon becomes chilled in the shade. Consumptives who had remained there the winter were all doing badly, and all told the same story. They improved rapidly for the first month or six weeks of their stay, some gaining flesh at the rate of three or four pounds a week. After that time they rapidly declined, without obvious cause. March is the coldest and most disagreeable month in Bermuda. All the winter months show a daily temperature in the sixties and seventies in the shade.

A winter's cruise through the tropics, I believe, would benefit many cases of consumption.

In a diary of a cruise through the West Indies, in the yacht "Josephine," of the New York Yacht Club, published under the quaint title of "West India Pickles," W. P. Talboys gives the following items regarding temperature, etc.:—

"November 17th. Off Porto Rico. We fully recognize to-day that we are in the tropics. The thermometer stands at 84° in the companion-way, and 95° on deck, and the flying fish skip round us in a lively manner. As we run full before the wind, with all sail made, the sun beats down on our heads as it never seems to at home, even in the dog-days; and the cabin is a grateful retreat, especially as it is the home of lemonade and other refreshments.

"November 22d. At Christianstedt, capital of Santa Cruz. The mercury stands at 90°, but we had a most delightful ride through the country, for fifteen miles, over splendid hard, smooth, level roads; broad avenues, bordered by cocoa palms, and rolling away through mile after mile of rich, waving fields of sugar cane.

"November 23d. Mosquitoes that sing as loud as bullfrogs, and bite like serpents, have appeared among us with the suddenness of one of Pharaoh's plagues.

"November 24th. In the harbor of St. Thomas. The cool land breeze on the deck of the tidy little 'Josephine,' is pleasanter than strolling about the up-and-down, sun-baked streets of the town.'

"November 26th. We have lovely days, with a very hot vertical sun, but tempered by the cool breath of the trade wind, until four o'clock, when the breeze dies out, and till six the air is very sultry and trying.

"November 29th. Off Saba. This remarkable island is simply a volcano, rising abruptly out of the sea to a sugar-loaf elevation of about 3000 feet; it is nearly round, and about two miles across. It is rather a difficult place to visit, as the tourist has to be hauled up the face of the rock in a basket, the inhabited spot being nearly a thousand feet up. In consequence of their lofty position, the inhabitants, some eight hundred Dutch, and their emancipated slaves, have a temperate climate, and grow all European fruits and vegetables.

"November 30th. Thirty miles N. W. of Basse Terre, the capital of Guadaloupe, becalmed. All day our sails flapped in the heavy ocean swell; the sun shot down his very hottest and most vertical rays.

"December 1st. All day we have been gently heaving on the long ocean swell, our sails idly 'slatting' in a flat calm.

"December 2d. Not a breath of air to fan the uncertain sails.

"December 6th. At St. Pierre, capital of the island of Martinique. The British consul returned on board and dined with us. I could not but admire his courage; we sat in the cabin with the mercury at 85°, perspiring freely in our shirt sleeves, while he never unbuttoned his blue and buttony uniform, and he never turned a hair.

"December 7th. Up the mountain ten miles, to 'les Eaux chandes' or thermo-mineral bath. For the first four miles our road lay by the side of the ocean, through delicious shady groves of cocoa palms, tamarinds, ceiba, and mangoes, by little farms, fields of cane and pretty embowered villages. Our way suddenly diverged into a little mountain bridle path, where ascending file, between masses of verdure and wilderness of blooms, and fording the many clear little torrents that gush out of the scarred old flanks of Peleus, brought us to a large plateau five hundred feet above the level of the sea, from which we had a most exquisite view. The bathing establishment is a wooden structure, with galleries all about it, but with all but the lower story open to the four winds of heaven. The water is of the Vichy order, and tastes quite alkaline, and is of the temperature of new milk. After bathing here one comes out like John Bunyan, after his pack rolled away from him, invigorated, refreshed, and oh! how hungry!

"December 10th. Bridgetown harbor, Barbadoes. We have been lying quietly at anchor all day, enjoying a repose, heightened by the certainty that everybody must be very hot ashore. The weather is too trying until nearly sundown.

"December 18th. The great trouble in yachting among these islands lies in obtaining provisions; not vegetables, for the markets are crowded with them; nor fruit, for it abounds in infinite variety, lusciousness, and cheapness; but meat is only obtained dripping from the freshly killed beast, and must be eaten the same day. We modify the inconvenience a little by carrying live stock, such as chickens, ducks, pigeons, turkeys, etc.

"December 20th, Trinidad. A perfectly delightful day, with the heat tempered by a fresh sea breeze.

"December 28th, Laguayra, Venezuela. The trip from Trinidad here is best described in Irving's "Life of Columbus." 'Every day displayed some new feature of beauty and sublimity; island after island, where the rocks, he was told, were veined with gold, the groves teemed with spices, or the shores abounded with pearls. Interminable ranges of coast, promontory beyond promontory, stretching as far as the eye could reach, luxuriant valleys sweeping away into a vast interior, whose distant mountains, he was told, concealed still happier lands and realms of greater opulence.' Hot! this is no expression for the sultry penetrating violence of the sun's rays, which not only illuminate and burn, but actually give color to objects.

"January 5th. In the windward passage, between Hayti and Jamaica. The day has been the most completely perfect one that we have had since our cruise began. An exquisite cloudless sky; just a mere ripple on the ultramarine of the sea; and a soft, balmy air, not uncomfortably hot—just a day to tempt the beautiful, purple Portuguese man-of-war, or Nautilus, on a cruise, and we see numbers of them floating by, with their tiny sails set, and their fleshy-looking ballast properly disposed of underneath them. Towards sunset we catch the first glimpse of the distant mountains of Cuba's southern coast, in a purple haze."

With this long extract, which I hope has its value in a medical way, I cease, for a time, my letters, until I have acquired experience of the climate of California.

San Bernardino Hot Springs, California, Feb. 16th, 1877.

The Value of Venesection.

Ed. Med. and Surg. Reporter:—

As there seems a disposition with many physicians at the present day to ignore the lancet, I, therefore, thought I would bring to the notice of the readers of this journal a case which has just occurred in my practice, the result of which proves to my mind very conclusively that bloodletting in some cases cannot be superseded by any other means. The case in question is as follows:—

I was called on the afternoon of the 2d inst. to visit M. N., aged between seventeen and eighteen years, who I was told was in labor with her first child. Upon my arrival I found my patient having a pain now and then, but labor had made but little progress. She complained of a violent headache, which made me feel somewhat uneasy about her, as I thought it seemed significant, but, notwithstanding, I left without doing anything for her, telling her attendants not to call me until they saw more evidence of me being needed. About eight o'clock in the evening her husband came after me in haste, saying his wife was having a "fit." Upon my arrival I found her coming out of the third convulsion, with very little dilatation of the os uteri, and everything in a rigid condition. She being a strong, fleshy, muscular woman, I at once drew from her arm (from a large opening in the vein) near half a tin basinful of blood; this brought on immediate relaxation, so that in less than three-quarters of an hour from the time I arrived I delivered a medium sized female child with the forceps. Convulsions still

continuing, although at longer intervals, I succeeded in getting her to swallow fifteen grains of chloral, and in one hour after, fifteen grains more. When this amount was given, I discontinued chloral and ordered bromide of potassium, fifteen grains to be given every one and a half hours. I left about midnight, with directions to continue the medicine until I came in the morning. Upon my arrival in the morning the attendants informed me that the bandage on her arm had loosened in one of her convulsions, so that she bled quite profusely again before they could get the blood stopped. However, after this she had no return of convulsions for an interval of three hours. The last she had was a little after noon of that day. It was not until the 7th inst. that she became fully sensible. She is now doing well, having a sufficient secretion of milk for her child, which is healthy and strong. This seemed a desperate case when I was called to it in the evening, as the convulsions were severe and recurred at intervals of but a few minutes. Therefore, I would say, in conclusion, had not this case been bled profusely, I am fully of the belief it would have run into a fatal issue. W. L. Martin, M. D.

Rancocas, N. J., 2d Mo., 23d, 1877.

Solution of Nitrate of Silver in the Treatment of Orchitis.

Ed. Med. and Surg. Reporter:—

From an extensive experience with the solution of nitrate of silver, I am satisfied that it is the most effectual remedy we possess for the speedy relief of this affection, forty eight to sixty-four hours being sufficient to effect a cure in the majority of cases. My idea is that it operates in the same manner as strapping, viz., by uniform pressure, thereby disgorging the blood-vessels of the parts, and by this means relieving the inflammation. I commence the treatment by cleansing the scrotum with warm water and castile soap, and after drying the parts with a towel, apply the following solution with a camel's hair pencil:—

℞. Argenti nitrat (cryst.), ℥ss
Aquæ destillatæ, ℥j
Fiat sol.

As soon as this application dries, apply the following:—

℞. Argenti nitrat (cryst.), grs. lxxx
Aquæ destillatæ, ℥j
Sig.—Apply morning and night.

Should any excoriation of the scrotum follow this application, omit it at such points. My object in applying the thirty-grain solution first is to protect the parts from the excoriating effects of the eighty-grain solution. Before I adopted this plan, I experienced some trouble on this account. Should the orchitis be complicated with secondary syphilis, the usual constitutional means should be employed in addition to the local treatment. J. J. Knott, M. D.

Atlanta, Ga.

News and Miscellany.

Health of Philadelphia in 1876.

Colonel John E. Addicks, Health Officer, submitted to Councils his annual statement of the births, marriages and deaths during the year 1876. Total number of births, 18,695; of these 9878 were males, 8817 females, 416 were colored and 150 were twins. In March there were 1705 new arrivals—the highest number for any one month—while the skies of May smiled upon the coming of but 1341.

The number of marriages during the year was 5341, a falling off of 803 from the previous year. The highest number for any one month was October, 522; the lowest, March, 360.

The total number of deaths were 18,892, an increase of 1087 over 1875. The greatest number (2523) took place in July; the least number (1242) in December.

Since 1860 there have occurred in the city:—Births, 285,750; marriages, 102,141; deaths, 271,800.

Another "Institute" Gone.

The New York Society for the Suppression of Vice has succeeded in closing the doors of the "Clinton Medical and Surgical Institute," at No. 147 East Fifteenth street, in that city. In September, 1873, the Society for the Suppression of Vice, having learned the character of the publications which the institute was scattering over the country, procured the arrest of the consulting physician, James Bryan, on a warrant issued by United States Commissioner Osborn, charging him with mailing obscene books, and advertisements of articles for malpractice, etc. Bryan was bailed in the sum of $5000, and in the following October was indicted.

Printer's Errors.

Those contributors to journals who become so deeply aggrieved at occasional errors in proof, may console themselves that their cases are rarely so bad as that of a certain Parisian *confrere*. The story is this:—

"Dr. M. recently sent to press a pamphlet on the causes, etc., of insanity. At the end of the last sheet he noted: '*Il faut guillemeter les alineas*' (attend to paragraphs), which the unfortunate printer changed into '*Il faut guillotiner les alienes*' (all mad people should be guillotined); and the doctor's work went forth with this astounding recommendation.

—We regret to see it stated that the *Eucalyptus globulus*, in Italy, appears not likely to answer the expectations which were at first formed of it, for it can only live in specially sheltered situations, and is not hardy enough to grow indifferently in any part of the Campagna.

Obituary Notes.

—Dr. Gordon Buck, a leading surgeon of New York, died in that city last week. Dr. Buck was a member of the New York Pathological Society, of which he was at one time president, and of the County Medical Society, the State Medical Society and the American Medical Association, and was a frequent contributor to medical journals, many of his articles being accounts of important surgical operations.

—Dr. Henry De La Cossitt died at Greenville, Pa., on the 2d inst., aged 74 years. He was commissioned a captain of a volunteer company, called the Greenville Infantry, in 1826, by Governor Schultz, and in 1835 became lieutenant colonel. Before the expiration of the last named commission he was appointed a justice of the peace by Governor Wolf, which office he held until the Constitution made the office elective.

—Dr. Jacob Huckel, an old citizen of Southwark, died lately, at his residence, Sixth and Catharine streets. He was 76 years of age.

—Surgeon Charles Chase, of the United States Navy, died on Friday, March 2d, in the 84th year of his age.

—Dr. John Hay died under suspicious circumstances, in New York city, February 26th, and foul play by one Conklin is suspected.

—Dr. Hamilton, connected with the Great Western Railroad, of Canada, from the start of that enterprise, died on the 1st, at Dundas, Ontario.

—Dr. John L. Temple, founder of the Homœopathic Medical College of Missouri, died in St. Louis last Saturday, aged 70.

Personal.

—Dr. John Sundberg, of Baltimore, sailed for Europe February 28th. During his absence he will act as special correspondent of the MEDICAL AND SURGICAL REPORTER. He is commended to the courtesies of the European medical press.

—Dr. Marion Sims has been elected Honorary Member of the Dublin Obstetrical Society. The number of such members is limited to twelve.

—A man styling himself Dr. Count de Merville has been arrested at Montreal for attempting to procure an abortion on a young French girl.

—Dr. Jacob Bigelow, the oldest and most eminent physician in Boston, has completed his ninetieth year. He has been, for the last few years, confined to his bed, and has lost his sight, but his mind is in perfect vigor, and his spirits cheerful.

—We are gratified to be able to say that Dr. X. C. Scott, of Cleveland, Ohio, who has been the victim of a despicable attempt at blackmail, has completely and triumphantly vindicated his character.

Items.

—An American, who has been studying the various systems of ventilation on the European continent, says that the Vienna Opera House is the best ventilated public edifice in the world. A large corps of men are permanently engaged to manage the fine machinery invented for ventilating purposes. The Capitol at Washington, and the new Grand Opera House in Paris, the American thinks, are among the most poorly ventilated public places in the world.

—The bills appropriating $100,000 each to the University of Pennsylvania, and the Jefferson Medical College, were passed in the Pennsylvania State Legislature. The appropriation asked for the former was $125,000, and the reduction was made by amendment of Mr. Douglass, who now claims that he has earned his session's salary.

—The Pharmaceutical Examining Board has registered 590 proprietors, and 325 qualified assistants, 17 having received certificates during the year.

—A country newspaper says: "They are making a big ado over a negro in New York, who is 112 years of age. If our grandfather were living he would be 142 years old."

—In our next we shall give the particulars of the alumni meetings and commencements of the two medical schools of this city.

QUERIES AND REPLIES.

Conjunctivitis.

C. R. D.—I have seen the worst cases of granular conjunctivitis yield, in from six to eight weeks, to a *saturated* solution of sulphate of copper, applied to the granular surface twice daily, with a brush. The solution must be applied by the surgeon himself, and applied freely. S.

Gonorrhœa.

Did any one, for a tedious case of gonorrhœa, the irritation confined near the end of the penis, and kept up in spite of all medication, ever insert a piece of catheter, and wrap the part with "rubber dam," or elastic caoutchouc, tight enough just to empty the parts of blood, and if so, with what result? L. V. N.

Dr. S. S., of Pa.—There is no separate work published in this country on the metric system. A Bureau has been established in Boston for the introduction of the system.

DEATHS.

FEGLEY.—At Oley, Pa., January 22d, of diphtheria, Ambroise Paré, aged two years, five months, son of Dr. A. N. Fegley.

TOLSON.—Died at his residence, in Vermilion Parish, Louisiana, October 3d, 1876, Dr. Thomas T. Tolson, aged forty-six years.